



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,663	04/05/2000	Roland Lamer	15-IS-5288(70191/235)	7305

7590

03/25/2003

Steven C Becker
Foley & Lardner
firstar Center
777 East Wisconsin Avenue
Milwaukee, WI 53202-5367

EXAMINER

FRENEL, VANEL

ART UNIT

PAPER NUMBER

3626

DATE MAILED: 03/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/543,663

Applicant(s)

LAMER ET AL.

Examiner

Vanel Frenel

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 19-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 19-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Notice to Applicant

1. *This communication is in response to the amendment filed December 17, 2002.*

Claims 1-11 and 19-31 remain pending. Claim 1 is amended. Claims 12-18 are cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 and 19-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al (6,260,021) in view of Mason et al (5,668,998).

(A) As per claim 1, Wong discloses a data management system for patient data, comprising:

a first component having a functionality code segment and a user interface code segment (Col.8, lines 65-67 to Col.9, line 21);

a second component having a functionality code segment and a user interface code segment (Col.8, lines 65-67 to Col.9, line 21); and

a container application having a first user interface layer in communication with the first component and a second user interface layer in communication with the second component (Col.6, lines 1-55). Wong does not explicitly disclose

wherein the first and second user interface layers are configured to communicate patient data between the functionality code segments of the first and second components, respectively, and a common user interface .

However, this feature is known in the art, as evidenced by Mason. In particular, Mason teaches the first and second user interface layers are configured to communicate patient data between the functionality code segments of the first and second components, respectively, and a common user interface (See Mason Col.5, lines 26-67 to Col.6, 58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mason within the computer-based medical image distribution system and method's of Wong with the motivation of enabling an application programmer to customize individual objects in the framework or to alter parameter values and object behavior. Modification accommodates changes to the service interface objects provided by the framework. Furthermore, the service interface objects provided by the toolkit framework substantially reduces the effort hours expended on the development of application programs which conform to the DICOM standard to provide DICOM services on a PACS (See Mason Col.3, lines 26-34).

- (B) As per claim 2, Wong discloses the data management system wherein the functionality code segment of the first component is configured to store and retrieve patient image data (Col.10, lines 13-27).
- (C) As per claim 3, Wong discloses the data management system wherein the functionality code segment of the second component is configured to store and retrieve patient text data (Col.1, lines 52-59).

(D) As per claim 4, Wong discloses the data management system wherein the first and second user interface layers are configured to format the patient data from the first and second functionality code segments with the same look and feel (Col.3, lines 31-60).

(E) As per claim 5, Wong discloses the data management system, the container further comprising a first service layer in communication with the first component and a second service layer in communication with the second component, wherein the first and second service layers are configured to communicate data between the functionality code segments of the first and second components and a service (Col.12, lines 65-67 to Col.13, line 59).

(F) As per claim 6, Mason discloses the data management system wherein the service includes a telecommunication service (See Mason Col.8, lines 1-13).

(G) As per claim 7, Wong discloses a data management system for patient data, comprising: a first application for retrieving patient image data from a database (Col.10, lines 13-47);

a second application for processing patient text data (Col.7, lines 1-58); and

Wong does not explicitly disclose a data manager in communication with the first and second applications, wherein the data manager includes a user interface code

Art Unit: 3626

segment in communication with the first and second applications for receiving the patient image data and patient text data for generating display signals based on the patient image data and the patient text data according to a predetermined display format.

However, this feature is known in the art, as evidenced by Mason. In particular, Mason teaches a data manager in communication with the first and second applications, wherein the data manager includes a user interface code segment in communication with the first and second applications for receiving the patient image data and patient text data for generating display signals based on the patient image data and the patient text data according to a predetermined display format (See Mason Col.7, lines 15-63).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mason within the computer-based medical image distribution system and method's of Wong with the motivation of enabling an application programmer to customize individual objects in the framework or to alter parameter values and object behavior. Modification accommodates changes to the service interface objects provided by the framework. Furthermore, the service interface objects provided by the toolkit framework substantially reduces the effort hours expended on the development of application programs which conform to the DICOM standard to provide DICOM services on a PACS (See Mason Col.3, lines 26-34).

Art Unit: 3626

(H) As per claim 8, Wong discloses the data management system further comprising a display unit configured to receive the display signals and provide a display based on the display signals (Col.7, lines 29-37).

(I) As per claim 9, Wong discloses the data management system wherein the predetermined display format has a look and feel for both the patient image data and the patient text data (Col.11, lines 17-64).

(J) As per claim 10, Wong discloses the data management system further comprising a third application configured to process data, the user interface code a segment in communication with the third application and configured to receive the data and to generate display signals based on the data (Col.13, lines 2-44).

(K) As per claim 11, Wong discloses the data management system wherein the third

application is in communication with the internet (Col.8, lines 53-67 to Col.9, line 21).

(L) As per claim 19, Wong discloses a data management system for patient data, comprising:

first means for processing patient image data (Col.11, lines 4-48);

second means for processing patient text data (Col.11, lines 17-64; Col.14, lines 1-42). Wong does not explicitly disclose third means for communicating between the first and second means, for receiving patient image data and patient

Art Unit: 3626

text data from the first and second means, and for displaying the patient image data and patient text data according to a predetermined display format.

However, this feature is known in the art, as evidenced by Mason. In particular, Mason teaches third means for communicating between the first and second means, for receiving patient image data and patient text data from the first and second means, and for displaying the patient image data and patient text data according to a predetermined display format (Col.12, lines 33-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mason within the computer-based medical image distribution system and method's of Wong with the motivation of enabling an application programmer to customize individual objects in the framework or to alter parameter values and object behavior. Modification accommodates changes to the service interface objects provided by the framework. Furthermore, the service interface objects provided by the toolkit framework substantially reduces the effort hours expended on the development of application programs which conform to the DICOM standard to provide DICOM services on a PACS (See Mason Col.3, lines 26-34).

(M) As per claim 20, Wong discloses the data management system wherein the first means includes a PACS component (Col.1, lines 21-37).

(N) As per claim 21, Wong discloses the data management system wherein the first

Art Unit: 3626

means includes a user interface code segment, and the third means a includes a user interface layer in communication with the user interface code segment (Col.13, lines 1-44).

(O) As per claim 22, Wong discloses a method of displaying patient data from a plurality of applications, comprising:

receiving patient image data (Col.11, lines 4-48);

receiving patient text data (Col.7, lines 1-58). Wong does not explicitly disclose configuring both the patient image data and patient text data according to a predetermined display format; and displaying the configured patient image data and patient text data.

However, this feature is known in the art, as evidenced by Mason. In particular, Mason teaches the patient image data and patient text data according to a predetermined display format; and displaying the configured patient image data and patient text data (Col.5, lines 39-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mason within the computer-based medical image distribution system and method's of Wong with the motivation of enabling an application programmer to customize individual objects in the framework or to alter parameter values and object behavior. Modification accommodates changes to the service interface objects provided by the framework. Furthermore, the service interface objects provided by the toolkit framework substantially reduces the effort hours

Art Unit: 3626

expended on the development of application programs which conform to the DICOM standard to provide DICOM services on a PACS (See Mason Col.3, lines 26-34).

(P) As per claim 23, Wong discloses the method further comprising receiving the patient image data from a PACS database (Col.1, lines 21-38).

(Q) As per claim 24, Mason discloses the method wherein the predetermined display format includes a display format for an icon (See Mason Col.7, lines 1-9).

(R) As per claim 25, Mason discloses the method wherein the predetermined display format includes a display format for a menu . (The Examiner interprets advanced navigation techniques as a form of display format for a menu)(Col.7, lines 3-9).

(S) As per claim 26, Wong discloses the method further comprising communicating the patient image data through a user interface layer (Col.1, lines 65-67 to Col.2, line 37).

(T) As per claim 27, Wong discloses the method further comprising providing patient image data to one of the internet and an intranet (Col.6, lines 44-55).

(U) As per claim 28, Wong discloses the data management system further comprising a third component having a functionality code segment and a user

Art Unit: 3626

interface segment, wherein the container application is configured to communicate patient between the functionality code segments of the first, second and third components, respectively, and a common user interface (Col.8, lines 15-67).

(V) As per claim 29, Wong discloses the data management system wherein the functionality code segment of the third component is configured to communicate with the Internet (Col.6, lines 44-55).

(W) As per claim 30, Wong discloses the data management system wherein the service communications with the first and second service layers via a predetermined protocol (Col.8, lines 31-67).

(X) As per claim 31, Wong discloses the data management system wherein the predetermined protocol includes componentware (Col.8, lines 53-67).

Response to Arguments

4. Applicant's arguments filed December 27, 2002 regarding claims 1-11, 19-31 have been fully considered but they are not persuasive. Applicant's arguments will be addressed hereinbelow in the order in which they appear in the response.

(A) At pages 6-7, Applicant argues Mason does not teach or suggest "a container application with first and second user interface layers configured to communicate patient data between the functionality code segments of first and second components, respectively, a common user interface". The Examiner disagrees.

In response to Applicant's arguments, Examiner notes that Wong discloses the claimed interface layers i.e., "these interface engines may reside on a single system, which can be optionally collocated with medical image server 12. Also for purposes of illustration, these interface engines are illustrated as each interfacing one PAC or RI system. Alternatively, each interface engine can interface more than one PAC or RI system of the same type, separate interface engines generally being required to interface to different types PAC or RI systems in order to match each system's unique interface definition to the uniform object interfaces defined in the medical image server of this invention" (See Wong, Col.8, lines 15-67). Therefore, Wong discloses the claimed feature and Applicant's arguments are not persuasive.

(B) At page 8, Applicant argues neither Wong nor Mason either separately or together, teaches or suggests a data manager including a user interface code segment in communication with first and second applications for receiving the patient image data and the patient text data for generating display signals based on the patient image data and the patient text data according to a predetermined format". The Examiner disagrees.

Wong discloses the claimed user interface code segment in communication with first and second applications as "web server data segment 94 primarily includes data needed for download to client workstations. This data includes initial presentation information stored in HTML / XML page component 96. The web server also downloads appropriate components of the GUI as needed for entry of users requests and for

Art Unit: 3626

display of image data. These GUI components are preferably structured as Java applets for workstations hosting a web-server or, alternatively, as a complete Java GUI applications, and are stored in GUI applets component 98 or in GUI application component 100, respectively (See Wong, Col.13, lines 1-63). Wong further discloses receiving the patient image data and the patient text data for generating display signals based on the patient image data and the patient text data according to a predetermined format" (i.e., object –based health-care information systems, in particular Master Patient Index ("MPI") system 40. Third-tier client systems include user equipment ranging from thin clients, to standard PCs, to more powerful UNIX workstations, as well as possibly including specialized devices. All such client devices are referred to herein as "client workstations or simple as "workstations" (See Wong, Col.7, lines 1-67 to Col.8, line 64; Col.9, lines 1-63). Therefore, Wong discloses the claimed feature and Applicant's arguments are not persuasive.

(C) At pages 10-11, Applicant argues there is no discussion in Mason of "a means for communicating between first and second means, for receiving patient image data and patient text data from the first and second means, and for displaying the patient image data and patient text data according to a predetermined display format." The Examiner disagrees.

In response to Applicant's arguments Wong discloses the claimed a means for communicating between first and second means which Examiner interprets as "object –based health-care information systems, in particular Master Patient Index ("MPI")

Art Unit: 3626

system 40. Third-tier client systems include user equipment ranging from thin clients, to standard PCs, to more powerful UNIX workstations, as well as possibly including specialized devices. All such client devices are referred to herein as "client workstations or simple as "workstations" (See Wong, Col.7, lines 1-67 to Col.8, line 64; Col.9, lines 1-63). Therefore, Wong discloses the claimed feature and Applicant's arguments are not persuasive.

In response to Applicant's arguments Wong further discloses receiving the patient image data and the patient text data for generating display signals based on the patient image data and the patient text data according to a predetermined format" (i.e., object –based health-care information systems, in particular Master Patient Index ("MPI") system 40. Third-tier client systems include user equipment ranging from thin clients, to standard PCs, to more powerful UNIX workstations, as well as possibly including specialized devices. All such client devices are referred to herein as "client workstations or simple as "workstations" (See Wong, Col.7, lines 1-67 to Col.8, line 64; Col.9, lines 1-63). Therefore, Wong discloses the claimed feature and Applicant's arguments are not persuasive.

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the

Art Unit: 3626

THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied art teaches medical diagnostic report forming apparatus capable of attaching image data on report (5,581,460) and image data management system particularly for use in a hospital (5,586,262).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952. The examiner can normally be reached on 6:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

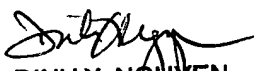
Application/Control Number: 09/543,663

Page 15

Art Unit: 3626

V.F
V.F

March 7, 2003


DINH X. NGUYEN
PRIMARY EXAMINER